REMARKS

Claims 75-78, 80-83, 86-87, 92-103, 105, 107 and 112 are pending. By this Amendment, claims 75, 77, 78, 80-83, 86, 87, 92, 93, 95, 97, 98-103 and 105 are amended, claims 79, 84, 85, 88, 89, 90, 91, 104, 106, 108, 109, 110 and 111 are cancelled and new claim 112 is added.

As will be explained below, the new claims are drafted in response to business reasons, some of which have arisen as a direct result of the constant string of delays caused by the USPTO both in this case and in other patent applications by the same inventors. Applicants expressly reserve the right to pursue any subject matter of any claim cancelled to date in this application or any application that claims priority or substance from this application.

As an initial matter, Applicants wish to thank Examiner Ruhl for identifying the various inadvertent mistakes made during prosecution by Applicants' representative. Applicants further wish to thank Examiner Ruhl for pointing to an oversite by Applicants' representative in not filing an IDS for those documents cited in a PCT Search Report (PCT/US04/28217) and/or cited by Applicants in the relevant Petition to Make Special. However, Applicants do wish to state that they considered the cited art irrelevant given the particular paragraphs that were cited and the particular arguments made. For example, neither reference (Realtor or Robbins) cited referred to a database of AVM values, and the motivation to combine provided by the Report was a naked conconclusory statement that neither passed the existing teaching-suggestion-motivation (TSM) standard or the later holdings of KSR v. Teleflex requiring that motivations to combine/modify be explicit. Additionally, the PCT Search Report misapplied the relevant law, e.g., applied a printed matter case to claims reciting computer readable mediums.

Pushing forward, Applicants wish to apologize to Examiner Ruhl for any inconvenience caused to him as he adopted prosecution of this Application.

Initial Matters

IDS Issue #1: The Office Action (page 40) expressly disregards the statements of "The Big AVM Lie" stating that "*this article is merely the opinion of the writer.*" While Applicant are appreciative of Examiner Ruhl's zeal regarding formalities, Applicants point out that the Office Action has provided no support whatsoever that an item submitted in an IDS must adhere to any formal rules of evidence. In fact, during the June 6, 2007 personal interview that included

Primary Examiner Ruhl, SPE Weiss and Director Coggins, it was Director Coggins that stated with regard to the Quinn article (paraphrasing) that it doesn't matter whether a reference is right or wrong, a prior art reference stands for what it says.

Applicants also respectfully assert that practically any statement of any article, including the Quinn article, may amount to an opinion. Statements made by professionals in courts of law often amount to nothing more than "an opinion", but as long as there is some basis of fact to support the opinion, it may be entered into evidence. As factual information was cited in both the "The Big AVM Lie" article and the subsequent commentary made by other professional appraisers, it should not be discounted as merely "an opinion" having no merit. It is worthy of note that "The Big AVM Lie" is not the rants of some unnamed individual, but derived from a professional organization of appraisers and includes testimonials by a variety of appraisers (not just the writer) disclosing particular events where people relying on AVMs did so at their peril.

Applicants note that a review of the various references applied against Applicants' claims have included not just what may be characterized as opinion pieces (e.g., Quinn), but also articles that amount to advertisements, such as the Verovalue reference. As advertisements often consist of "fluff", insubstantial bragging, unrealized or unrealizable products and opinion, Applicants most respectfully ask that the objections against Applicants cited art be given full weight, or else ask the USPTO to provide clear written standards that govern the underlying issues.

IDS Issue #2: Applicants respectfully submit that, based on the language of the current Office Action, the Examiner has given the same amount of weight to the eCommerce 2002 article as the article discussed immediately above. Applicants respectfully ask acknowledgment of the substance of the eCommerce 2002 and an explanation as to why its substance was ignored in the current Office Action.

IDS Issue #3: The Office Action (page 4) has asked Applicants to consider submitting an IDS for references known to Applicants, but which have not been formally placed into prosecution by the Examiner. To date, this amounts to the Realtor Workstation reference, which Applicants now consider redundant at best to the MRIS reference previously cited by Examiner Vig.

Applicants also wish to note that, while they would kindly agree to provide better copies of the various slides of the Realtor Workstation reference as requested, limitations of available

coping devices do not make this possible. However, Applicants do wish to point out that these documents may be made available by Examiner Vig, who did the related PCT Search Report and provided the original copy to Applicants.

1.131 Declaration Issues: In response Examiner Ruhl's statements on page 2, the Declaration under 37 CFR 1.131 is now re-submitted with thanks to Examiner Ruhl for pointing out the MPEP's interpretation of 37 CFR 1.131, which unfortunately does not take into account situations involving multiple inventors.

Applicants point out that the current 1.131 Declaration, signed by both inventors, provides evidence of reduction to practice of the generation of AVM values, the storing of AVM values in a database and the querying of a database of AVM values. It is a fundamental purpose of a database to store data, and the evidence provided by Applicants includes a SQL database with the term "AVM Price" (ironically the very same term demanded in an earlier Office Action), portions of code directed to the generation and storage of AVM values, highly descriptive variable names within the code, and comments embedded within the code providing a measure of explanation.

Accordingly, the replacement Declaration under 37 CFR 1.131 is sufficient.

1.132 Declaration Issues:

Copying: The Declaration relating to copying previously submitted under 37 CFR 1.132 is now supplemented with deep apologies for the substantial confusion and suspicion caused by the correction of an obvious error in the title of the Declaration. Applicants assert that there can be no issue of deceit as the correction made was not substantive in any respect and understandable given the substance of the Declaration. However, in response to the concerns of Examiner Ruhl as expressed on page 3, Applicants gladly submit a supplementary Declaration under 1.132 to alleviate further confusion.

Regarding the issues of substance cited by the Office Action, Applicants have provided an enhanced amount of evidence to obviate Examiner Ruhl's express reservations. However, Applicants wish to address the Office Action's statement that "*for 66 people to have 78 visits over a period of two months, means that each person averaged just slightly over 1 visit each,*"

followed by the question "*[h]ow is that evidence of copying*?" Applicants first address the logical fallacy of "average visits" as even if there were 66,000 people that visited for a total of 78,000 times, this still "*means that each person averaged just slightly over 1 visit each.*" Accordingly, Applicants respectfully submit that the particular statistic provided by the Office Action is meaningless if not misleading.

What is shown by the Declaration is direct access (not just accessibility) of the Homekeys website far in excess of what would be considered normal. Applicants point out that the 78 visits from 66 people from a single IP address exceeds any other single source of traffic, which is especially curious given that the IP address originated from Seattle, WA, and Homekeys represents properties in three counties in Southern Florida. The likelihood that 66 people in a single building in one of the most northern cities in the most northwest state in the continental U.S. all happened to be interested in real estate in one of the most southern cities in the most southwest state in the continental US is highly unlikely. Coupled with the fact that Zillow, a company occupying the building in question, happened to produce a beta-site four months later that incorporated a combination of features that had previously been unique to Homekeys.net, and the evidence of copying is inescapable.

As to the applicability of tracking IP addresses and issues of copying, these issues are so well recognized that Internet providers, such as Quest.net, have formal rules and contacts for handling infringement issues.

Still further, Applicants point to a communication made between Mr. William Kennedy of Homekeys.net and Mr. Drew Meyers of Zillow.com (paragraph 12) where Mr. Meyers made comment about Zillow employees being very much aware of the Homekeys.net site.

Market Success: A Declaration under 1.132 demonstrating success in the Internet is provided. As outlined in the Declaration, the AVM technology as provided in claim 76 has enabled Zillow to quickly reach and subsequently maintain dominant Internet traffic, which is the basis for generating revenues on the Internet.

Praise by Peers: A Declaration under 1.132 demonstrating praise by peers is provided. As outlined in the Declaration, the AVM technology as provided in claims 76+77 has won praise by a leading real-estate authority.

Issues under 35 USC §1.132(2): Applicants greatly appreciate the attention to detail brought by Examiner Ruhl on this issue. Applicants have purged any material that might constitute new matter. However, Applicants do believe that language relating to subgroups is both permissible and not new matter. After all, if a hypothetical system is capable of discriminating among big dogs and small dogs, as well as capable of discriminating among white dogs and brown dogs, it would naturally imply the capacity to discern big brown dogs from other dogs.

The Office Action Misconstrues Terms of Art

In reply to a number of assertions made by the Office Action on Page 39, the Office action rejects the definition for the term "AVM" provided by Applicants based on a broad range of legal and logical errors.

As an initial matter, the Office Action asserts that an AVM is "*a term that applies to a broad host of valuation* [sic]" and that "*any valuation that is computer generated can reasonably* [sic] *considered an AVM as this is a broad term.*" The Office Action then proceeds to assert that valuation processes that directly involve human judgment are AVMs, then proceeds to support this statement by: (1) mischaracterizing statements made during prosecution, (2) ignoring a definition and supportive statements made by authoritative sources, (3) ignoring the relevant laws on what does and what does not need to be disclosed in an application, (4) mischaracterizing the Applicants' disclosure, (5) mischaracterizing the applied art, and (6) selectively ignoring statements in art previously cited by the USPTO that unequivocally supports Applicants' definition.

(1) The Office Action Mischaracterizes Statements Made During Prosecution

Applicants note that Examiner Ruhl states on pages 39-40 that he believes that Applicants have asserted that "*if a human is **involved** in the AVM process, the result cannot be an AVM value.*" {bolded emphasis added} Respectfully, this statement is a mischaracterization of what Applicants actually have asserted. Applicants respectfully request that Examiner Ruhl review the various Responses in this matter – carefully – as the term "involvement" and its equivalents and variations were never made in such context as suggested by the Office Action.

To the contrary, what Applicants have asserted that "**human judgment**" (not "human involvement") directly applied to a valuation process precludes a resultant value from being an AVM.

With regard to the statement made in the Office Action (page 40) that some human involvement is necessary to create an AVM, Applicants point out that (of course) human involvement may be used to identify a property of interest without violating the definition of an AVM. These are clerical issues, not issue of human judgment. Applicants also point out that, as a matter of common sense, that humans may develop the underlying AVM algorithms, write the underlying computer code, develop the underlying databases and a host of other processes without contradicting the provided definition of AVMs or statements (in context) relating to AVMs. Humans may also be used to manufacture the computer components, develop the underlying operating system and generate the electricity used to run the computer components. It is impossible to divorce the concept of human involvement somewhere for anything man-made. That is not the issue, and the logical approach of the Office Action's underlying attempt to discount the term AVM could just as equally be used to eradicate the term "automated" from the English language.

(2) The Office Action Ignores Definitions and Statements Made by Authoritative and Knowledgeable Sources

Contrary to the 6/23/07 Office Action's assertion that the definition provided by Applicants is "*one that is contrary to what is accepted in the art*," (page 39) Applicants' definitions and descriptions are well based. Applicants point out that the definition and supporting statements supplied in the 12/28/2006 Response were word for word quotes provided by the Uniform Standards of Professional Appraisal Practice (USPAP), which is a document produced by the Appraisal Foundation. The Appraisal Foundation is an organization that is considered knowledgeable on the issue of real estate valuation, and it should be appreciated hat the Appraisal Foundation drafts standards on both appraisals and AVMs. The Appraisal Foundation's authority is such that the United States Congress has authorized the Appraisal Foundation to draft such standards. See, http://www.appraisalfoundation.org/.

AVMs and appraisals are different things. In further support of Applicants' provided definitions and characterizations, Applicants note that the USPAP defines an appraisal as follows:

> **APPRAISAL:** (noun) the act or process of developing an opinion of value; an opinion of value. (adjective) of or pertaining to appraising and related functions- e.g., appraisal practice, appraisal services.[1]

Still further, the New Dictionary of Cultural Literacy (2002) defines an appraisal as:

> **APPRAISAL:** A formal evaluation of property by and expert, used to establish its market value"[2]

In addition to official definitions proffered by standards-making bodies and made in dictionaries, Applicants draw attention to one of the references cited by the Office Action, Robbins (US Pat App No. 202/0007336), which states in par [0079]:

> An "appraisal" is an opinion of value. Although it is an impartial, expert, and reasoned conclusion formed by a trained professional based on an analysis of all relevant evidence, it is still an opinion. It represents the appraiser's perception of the most likely, most probable price available in an arm's-length transaction for the appraised interest subject to the qualifying conditions imposed.

Further, the term "assessment" is defined as follows:

> **ASSESSMENT:** (noun) the appraisal of property for the purposes of taxation.[3]

It is especially to be considered that mankind has not yet developed any machine that can have "*an opinion of value,*" or any opinion whatsoever. This is not to say that a person may not develop an appraisal based on an AVM, but certainly the definition of an AVM precludes direct human judgments and opinions. Appraisers are known use calculators, spreadsheets, analytic software, and so on to develop appraisals, but computer tools used in an appraisal process by a

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[1] http://commerce.appraisalfoundation.org/html/2006%20USPAP/ao13.htm

[2] See, The New Dictionary of Cultural Literacy - chapter on Business and Economic, p. 449.

[3] Id.

human don't result in an AVM value, but an appraisal - or for the purposes of taxation, an assessment. The Appraisal Foundation is on record as distinguishing AVMs from appraisals stating:

> "An AVM is a tool that delivers an estimation or calculation, **whereas an appraiser arrives at a value opinion by applying his or her judgment and experience**. An appraisal is defined as "an opinion of value," which is distinctly different from an estimate or calculation of value. **An AVM uses automated processes and cannot produce an opinion of value because only individuals can exercise judgment and form opinions**. An AVM is just one tool among many that an appraiser might use to arrive at an opinion of value."[4] {Bolded emphasis added}

Thus, it is apparent that Applicants' proffered definitions are perfectly consistent with the definitions and statements provided by highly prestigious sources known in the industry.

(3) The Office Action Ignores The Relevant Laws on What Does and What Does Not Need to be Disclosed in an Application,

While the Office Action (correctly) states that the term AVM was not defined in the Application as originally filed (page 39), and subsequently discounts Applicants supplied definition, Applicants are aware of no requirement either in the MPEP or in the relevant case law that requires Applicants to include definitions for terms of art in their disclosure. To the contrary, it is Applicants' understanding that extrinsic sources may be used regarding the meaning of technical terms. *Phillips v. AWH Corp.*, 415 F.3d at 1314, 75 USPQ2d at 1327.

Accordingly, Applicants respectfully request that Examiner Ruhl provide the appropriate legal authority for his position or an explanation as to why Applicants are required in the instant matter to adhere to what appears as an apparently unknown legal standard.

(4) The Office Action Mischaracterizes Applicants Disclosure,

[4] http://www.appraisalfoundation.org/s_appraisal/bin.asp?CID=12&DID=1041&DOC=FILE.PDF

On page 39, the Office Action asserts that '"*AVM" is a term that applies to a broad range of valuation methodologies*', then proceeds to mischaracterize Applicants disclosure to support this assertion. An example of the Office Action mischaracterizing Applicants disclosure includes the Office Action's statement about paragraph [0036] which discusses the form and functionality of the exemplary underlying AVM (being a combination of heuristic and statistical algorism) but pointing out that such form and functionality may very well change to encompass other technologies in other embodiments.

As an initial point, Applicants have never stated or remotely implied that "*any valuation process may be used*" as is asserted by the Office Action. Applicants respectfully ask Examiner Ruhl not to make statements on behalf of Applicants that Applicants have never made, and to apply appropriate context to those statements Applicants have made.

The context of paragraph [0036] does not lend itself to be characterized as to include AVM technology based on human judgment, but to expressly point out that, as is known to those skilled in the art, that the various technologies regarding AVMs do vary and that the disclosed methods and systems are not dependent on any particular AVM algorithm.

. Further, as clearly shown in the following paragraphs, various exemplary methods and systems are shown to produce AVMs without human judgment used during the valuation processes, and additionally point to Fig. 2 to the AVM Device 230 and the respective text at paragraphs [0036]-[0048] where the AVM Device 230 is cited as producing AVMs under a variety of circumstances, but not one involving human judgment.

Thus, Applicants respectfully assert that the there is no text in Applicants' disclosure to support the concept that human judgment may to be used in deriving AVM values.

(5) The Office Action Mischaracterizes the Applied Art

(a) Sklarz: To the degree that the Office Action relies on Sklarz and the remarks about Sklarz in the related Petition to Make Special, Applicants assert that Sklarz discloses the use of AVMs, but no AVM valuation process that uses human judgment.

The mischaracterization by the Office Action might very well be readily attributed in part to the lengthy disclosure (over 257 paragraphs) of Sklarz, but the very length of Sklarz in the context of those portions cited by the Office Action clearly dispel any idea that Sklarz (or

Applicants' statements regarding Sklarz) supports the concept of AVM values produced by human judgment.

That is, Applicants still assert that Sklarz discloses the use of AVMs, and respectfully point Examiner Ruhl's attention to paragraph [0250], **which makes the first mention of AVMs**. This paragraph was never cited in the present Office Action, and in fact Applicants respectfully point out that the Office Action (pages 18+) in its 35 USC 102 rejection cites paragraphs [0041],[0047], [0056], [0059]-[0061], which together average about 190-200 paragraphs distant of the appropriate AVM-related text. Applicants also point out that the one paragraph [0213] closest to Sklarz discussion of AVMs, which Examiner Ruhl relies upon on (page 19) substantially, is not only a full 37 paragraphs away from the first mention of AVMs, but speaks to the selection of comparable properties, not AVMs. Thus, the "responses" cited in paragraph [0213] can not fairly be said to relate to AVMs.

Thus, while Applicants' representative did correctly state that AVMs were disclosed in the related Petition to Make Special, it is incorrect to state that Sklarz discloses the use of human judgment in the AVM valuation process.

Thus, Applicants point out that the disclosure of Sklarz is perfectly consistent with Applicants' definition of AVM.

(b) Foretich: To the degree that the Office Action relies on Foretich and the remarks about Foretich in the related Petition to Make Special, Applicants assert that the language of Foretich is often unclear and that any mistake made by Applicants was due in part to an initial characterization by the Examiner in another PCT Search Report (PCT/US04/28206) and to nebulas language of the lengthy specification. Note, for example, that the relevant Search Report[5] cites Figs. 1 and 2 and related text (paragraphs [0025] to [0036]) to disclose a database containing AVM values, when the fact is that the cited text is directed to an exemplary computer architecture, databases used to create AVM values, such as MLS databases (par [0027]), populating databases (par [0035]) and selecting comparable properties (par [0036]). It was not

[5] Publicly available at http://www.wipo.int/ipdl/IPDL-IMAGES/PATENTSCOPE/68/ec/02/00ec02.pdf

necessary to address the AVM issue at the time as the arguments put forth by the PCT Search Report were noticeably flawed with respect to what was being sored in the cited paragraphs.

A subsequent review of Foretich shows that, while the term "valuation" is used liberally throughout, there is not a single instance of the term "automated valuation method", "automated valuation model", "AVM" or any such derivatives or equivalents anywhere in the lengthy (164 paragraph) disclosure. It should be appreciated that the term "automated valuation" is also absent. Without clear definitions in the language of Foretich, as well as the complete absence of the term "AVM", Applicants assert that Foretich cannot be used to support any form of definition for the term "AVM" or "AVM value". Thus, Applicants point out that the disclosure of Foretich does not contradict Applicants' definition of AVM.

Finally, while it is true that Applicants' representative referred to the valuations of Foretich as AVMs in an earlier communication, it is also true that the Examiner Ruhl has taken the apparent position of equating "human judgment" and "human involvement" as the terms may apply to AVMs. Accordingly, if (as stated by Examiner Ruhl and SPE Weiss in the October 9 telephone interview) Applicants' representative cannot disavow earlier statements made during prosecution, Applicants do respectfully ask whether Examiner Ruhl is bound to the same rules that they intend on applying to Applicants.

(6) The Office Action Selectively Ignores Statements in Art Cited against Applicants

The Office Action ignores statements made to support Applicants' definitions and characterizations that appear in the text of art applied against Applicants. Such an example of the Office Action ignoring its own cited art includes a statement in the Quinn article ("Appraisers are Learning to Live with Blackbox Technology") where Mr. Harry Ford, the prime subject of the Quinn article, clearly distinguishes AVMs from computer assisted appraisals (CAAs) with the distinction that computer-assisted appraisals involve "*human judgment*" where AVM values apparently do not. More particularly, Mr. Ford distinguishes AVMs from assessments (which are a form of appraisal) with the distinction that "*human judgment must always be involved.*"

Accordingly, regardless of whether Examiner Ruhl chooses to maintain an obviousness rejection based on the Quinn Article, the Quinn article clearly supports Applicants' position while negating the position taken by the Office Action.

Issues Under 37 CFR 1.132

The Office Action (page 5) objects to the disclosure, particularly paragraph [0084], as containing new matter. In response, Applicants have amended claim [0084], but do expressly reserve the right to fashion claims based on combinations of any legitimate subgroups. Applicants do appreciate Examiner Ruhl's attention to detail in this matter.

The Office Action (Page 6) further rejects claims 77, 78, 83, 86, 98, 99, 103, 104, 110 and 111 as containing new matter. By this Amendment, claims 77, 78, 83, 86, 99 and 103 are amended to obviate the issue, and claims 104, 110 and 111 are cancelled. Accordingly, withdrawal of the objection is respectfully requested with respect to these claims.

With respect to claim 98, Applicants point out that the claimed features do not relate to the issues discussed on pages 6-7, and believe that the inclusion of claim 98 is in error. Accordingly, withdrawal of the objection is respectfully requested with respect to claim 98.

Issues Under 35 U.S.C. § 101

The Office Action rejects claim 90 under 35 U.S.C. § 101 stating that the form of claim 90 represents a mixed (method and apparatus) claim type. This rejection is moot regarding claim 90 and traversed to the respect that it may be applied to amended claim 75.

In particular, Applicants point out that the language at issue doe not represent method steps and point out that even a cursory review shows the dramatic differences between the present claim language and the claims at issue in Ex Parte Lyell and IPXL Holdings.

Applicants also point out that the use the phrase "wherein the AVM values are repeatedly updated" does not represent the language of a method step but is descriptive language that may be fairly characterized as "adjectival passive" (where the word "updated" is used as an adjective) or "stative passive" (where the word "updated" describes a state of being). Applicants note that, in the English language, the line between an adjectival passive and a stative passive may be unclear.

Adjectival passives are not true passive verbs. They occur when a participial adjective (an adjective derived from a participle) is used predicatively. Note that the term "databases" is linked to the term "updated" by a linking verb, i.e., "is". ***Linking verbs*** do not express action.

Instead, they connect the subject to additional information about the subject. That is, a linking verb implies state of being or condition for the subject, not action. It links a subject to an equivalent word in a sentence, which for the present case is the word "updated" used as an adjective.

Stative passives, like adjectival passives, use a passive-like construction with a linking verb and a past participle. The construction refers to a state. In a stative passive, the participle functions more or less as an adjective, and can be viewed as a predicative to the subject.

Should Examiner Ruhl need further examples, Applicants respectfully point to claims 8 and 9 of U.S. Pat. No. 7,194,414, which includes similar language construction types (i.e., verbs used as adjectives or that describe states), and to which Examiner Ruhl allowed and the Board of Appeals and Interferences saw no issue of non-statutory mixed claim language.

While Applicants do not claim that all verbs in a wherein clause need to be of the forms discussed above to be considered valid functional descriptive language for apparatus claims, Applicants point out: (1) that the language of Ex Parte Lyell (cited by the Examiner) clearly states in the claim language the inclusion of method steps, which follow in gerund form; (2) the claim language of claim 25 in the IPXL Holdings case (also cited by the Examiner), i.e., "*wherein ... the user uses the input means to either change ...*", contains an active form of the verb "use" describing the action performed by a subject (the "user") on the predicate (the "input means"); and (3) neither the Ex Parte Lyell nor the IPXL Holdings case (also cited by the Examiner) did not even have 35 USC §101 as an issue. That is, neither the BPAI nor the Federal Circuit recognizes mixed statutory claim types as problematic under 35 USC §101.

Accordingly, withdrawal of the rejection is respectfully requested. However, if Examiner Ruhl might provide case law or specific examples from the MPEP that are on point, Applicants will gladly make the suggested amendment.

Issues Under 35 U.S.C. § 112, Second Paragraph

The Office Action rejects claim 76, 96 and 109 under 35 U.S.C. § 112, second paragraph, claiming that the Examiner believes that "essential" subject matter is missing from the claim scope. More particularly, the Examiner believes that offer for sale values would be required to

be in the database so that a differential value search may be performed. This rejection moot regarding cancelled claim 109 and traversed to the application of claims 76, 96 and 112.

In particular, Applicants first point out that the Examiner has provided no argument or evidence to show why it is necessary to put offer for sale values in the same databases, but merely makes a conclusory statement unsupported by any facts.

Second, Applicants point out that offer for sale value data may exists in separate databases, e.g., an MLS database, or even be stored electronically in non-database form in order to perform a DVS operation. Given that the various claimed databases include some from of property identifiers (e.g., the "first field" of claim 75), then it is certainly feasible to use such identifiers as an index to the appropriate offer for sale data. While it may be certainly helpful to place offer for sale data in the same database, it is certainly not essential as an issue of fact to do so.

Accordingly, withdrawal of the rejection is respectfully requested.

The Office Action further rejects claims 77, 78, 83, 86, 98, 99, 103, 104, 110 and 111 under 35 U.S.C. § 112, second paragraph, as being indefinite due to language such as "spatially embedded" or "spatially located" not being understood by the Examiner. This rejection is moot regarding amended claim 83, non-applicable to any language in claim 99, moot regarding cancelled claims 104, 110 and 111, and traversed with respect to claims 77, 78, 86, 98 and 103 noting that the term "spatially embedded has been replaced with the term "spatially located" for consistency.

In particular, Applicants point out that the words at issue are words of ordinary usage, and in the present context it should be appreciated that maps are well-known devices that function as a (typically, but not necessarily) two-dimensional representation of distributed features showing such features in their forms, sizes and spatial relationship to one another. For some object, such as an icon, to have a spatial relationship to the map and to other things represented in the map is neither confusing nor opaque. While the usage of the term "spatially" may be superfluous in the claims at issue, it cannot fairly be said to be indefinite.

Similarly, the term "consistent" cannot be said to be indefinite as it may be the best term for use in the claims at issue. For example, if a house is located at X-longitude and Y-latitude,

then an icon spatially located on a map would be located at that point on the map representing those coordinates. After all, the map, being but a representation, can only represent spatial relationships between objects consistent with the actual locations of those objects.

Accordingly, withdrawal of the rejection is respectfully requested.

The Claims are Directed to Patentable Subject Matter

The Quinn Reference

The Office Action rejects claims 75, 84, 85, 88, 89, 90, 91, 92, 93, 101 and 103 under 35 USC §103(a) an article entitled "Appraisers Learning to Live With Black Box Technology" by Lawrence Quinn (hereinafter "Quinn") in view of "Information on Fairfax County Property Assessment" (FCPA); and rejects claim 105 under 35 USC §103(a) over Quinn and FCPA in view of Frost (US Pat. App No. 2005/0273346).

These rejections are respectfully traversed. In particular, Applicants assert that Quinn, FCPA and Frost, individually or in combination, discloses a database of AVM values, as is recited in the independent claims.

As discussed in the meeting with Primary Examiner Ruhl, SPE Weiss, Director Coggins and Applicants' representative, Mr. Mathis, Mr. Mathis asserted that the Quinn article misused terms of art and patently contradicted itself with its misuse. For example, the Quinn quotes a Mr. Larry Ford, former director of real estate finance for Fairfax County, as stating that "*AVMs were used for tax assessment purposes.*" However, three sentences later Mr. Ford also states that "*... we emphasize that by calling the Fairfax system 'CAA' or 'computer-assisted assessment' ... it's clear that* ***human judgment should always be involved.***"{bolded emphasis added}.

In response, Applicants had not only pointed out the blatant contradictions in the Quinn article, but provided three references from Fairfax County's "Fund 104 Information Technology" budgets for FY 2001, FY 2002 and FY 2003. Again Applicants point out: (1) that Fairfax County's "Fund 104 Information Technology" budget for FY 2001 states under its Tax/Revenue Administration section (IT0006) (page 13) that Fairfax County had invested in appraisal software, not software suited to AVMs, and (2) that that Fairfax County's "Fund 104 Information

Technology" budget for FY 2003 for Tax/Revenue Administration section (IT0006) that Fairfax County had only purchased a "COTS real estate appraisal and administrative system."

Applicants again remind Examiner Ruhl that, according to the Fairfax County website[6]:

> "*Each year staff appraisers examine recent sales that occur within Fairfax County neighborhoods. These sales are studied to determine if they represent fair market value (the price a willing buyer will pay a willing seller on the open market) and to confirm the physical features of the property being sold. ... After adjusting for differences between properties, these sales are used as a guide to determine the proper assessment for all other properties in the neighborhood.*"

Thus, it is clear that before a single estimate of a single residential property is derived, human judgment is directly applied to determine the set of comparable properties. Additionally, it appears that Fairfax County employs its appraisers to perform inspections, i.e., to "*confirm the physical features*" of properties.

In response, the Office Action has limited comment to this evidence to page 39, which states that "*[t]he argued references do no provide any evidence that Fairfax county did not use AVM values in the year 2000*" and "*[p]rior art from a year or more later has not [sic] bearing on what is doe in the year 2000.*"

As an initial matter, not only has the Office Action ignored specific evidence, but misconstrued the remaining evidence. Applicants most respectfully point out that the earliest of the cited reference (Fund 104 for FY 2001 Fairfax County) states in the very first sentence that it represents a budged approved by the Fairfax County Board of Supervisors on **April 24, 2000 - exactly one month after the Quinn article**. As government budgets involving millions of dollars generally take months to approve[7], it is apparent that the FY 2001 budget was not only presented to the Fairfax County Board of Supervisors prior to the Quinn Article publication data, but the budget must have been formed sometime well into 1999 (the same year that the alleged AVM activity in Fairfax County occurred) based on needs and decisions made in 1999 and likely

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[6] See, http://web.archive.org/web/20040312114551/www.fairfaxcounty.gov/DTA/FAQ_Why_Change.htm

[7] Fairfax County budgets are presented to the Board of Supervisors in February of each year.

earlier. Applicants not that it is highly unlikely that someone would be bragging about the virtues of AVM technology at the same time that they were getting ready to replace that same technology with appraisal software.

However, as further proof that Fairfax County never procured AVM technology, Applicants have provided excerpts from previous Fairfax County budgets for FY 1997, FY 1998, FY 1999 and FY 2000. As can be seen in these documents, the only real estate valuation software purchased was "real estate appraisal COTS" (Commercial Off The Shelf) software in the FY 1998 budget (see, page 85, 3rd paragraph).

Accordingly, there is firm evidence that Fairfax County bought (and supposedly used) some form of automated appraisal COTS software, but never purchased or used AVM software.

Still further, Applicants point to Virginia's "Overview of Local Taxing Authority" (published in 2001 by the Virginia Board of Governors) (provided in the accompanying IDS), which describes the 26 different taxes available to local governments (see, page 1) including real estate taxation (pages 6-10). Applicants first note that the document discusses taxation practices extending from 1994 to 2000, and includes a real estate study covering 1998 and 1999 (the same year as the alleged AVM activity of Quinn). Applicant further draw attention to the section "Assessment Practices" (page 7) which states in part that the "tax on real property is levied annually by local governments against fair market value (FMV) of all taxable real property" and that "**FMV is determined by an appraisal process.**" {bolded and underlined emphasis added} Applicants note that the budgets of Fairfax County and the study of the Virginia board of Governors is perfectly consistent with the definition of "assessment" (being the appraisal of property for the purposes of taxation) provided above by Applicants. This statement is further confirmed by "Virginia Joint Subcommittee to Study and Revise Virginia Tax Code" (2001).

Accordingly, based on the evidence available to one of ordinary skill in the art at the time of the invention, two things are apparent: (1) Fairfax County never produced a single AVM as they didn't have the software available; (2) even if AVM software were available, Fairfax County was obligated to provide real estate appraisals, not AVMs, and (3) one of ordinary skill in the art would realize, based on the totality of the evidence, that the Quinn article used the term AVM erroneously and would assume that appraisals, not AVMs, formed the basis for Fairfax County appraisals. Thus, even if AVMs were used as some form of data point for any appraisal – along

with inspections and an appraiser's human judgment – the end product of Fairfax County's department of real estate taxation were appraisals, not AVMs.

Thus, Quinn does not teach each and every limitation of the independent claims. Further, as the FCPA and Frost fail to disclose the same limitation (and Frost being circumvented by Applicants 1.131 Declaration anyway), the independent claims therefore constitute patentable subject matter with the dependent claims constituting patentable subject matter by virtue of their dependency as well as for the additional features they recite.

Applicants further note that the comments made on page 34 (regarding claims 88 and 90) that "*the system that is used to actually arrive at the AVM value (the computer does the valuation) is inherently configured to update the AVM as each tax year passes by*" and that "*'the AVM values for the properties in the databases are "generally current" as claimed*' as highly problematic.

First, Applicants have shown with great detail that the assessments of Fairfax County are not current the day they are derived for two reasons including: the assessments are specifically rendered for January 1 of each year, and even on January 1 they BY DESIGN under-represent what even Fairfax County considers an arms-length market value by 8%.

Second, the statement on page 39 that the Fairfax County assessments are "*generally current*" by virtue of being "*the most recent numbers that are available*" is not the epitome of circular logic, but untrue as the various real estate markets even within a single county do not stand still or hinge based on proclamations by a Fairfax County bureaucracy.

The comments immediately above are also applicable to the statements made about claim 101 on page 35 of the Office Action.

Applicants further draw attention to the statements made on page 35 (regarding claim 89) where the Office Action states "*if one wanted to, they [Fairfax County] could run the AVM 6 times a year.*" Applicants respectfully point out that this statement is not only inconsistent with the LAW of Fairfax County where assessments are directed to a single day of the year (January 1), but ignores fundamental economics in that assessments cost money to perform, there would be no economic benefit in performing multiple assessments and, in fact, such actions would be

wasteful of taxpayer money and probably result in the firing of any manager responsible for such wasteful actions.

Applicants further note that, in view of the relevant laws of Fairfax County, even should a Fairfax Appraiser assess a property's value six times a year, the value derived should at best reflect an assessment applicable for January 1 of that year.

Still further, regarding the statement on page 35 regarding claims 92 and 93 where the Office Action describes the geographic/political boundaries between states and counties as "*boundaries set by people [that] lend no structure of the system itself*" as not only untrue, but naïve. Applicants point out that not only do the very patent laws under Title 35 sensitive to political boundaries, but that it is the nature of political boundaries to cause certain problems that need solving. In the present case, it should be appreciated that, not only would Fairfax County supervisors possibly be fired for, say, performing assessments in neighboring Loudon County for wasteful actions that could have no effect on property assessments and taxation in Loudon County, but such actions would likely result in massive taxpayer lawsuits and/or legal actions by Loudon county against Fairfax County. Further, as each county has its own privacy and tax assessment standards, any assessment practices in Fairfax County (or any AVM model structured for Fairfax County) would not likely perform well for Loudon County.

Simply ignoring the effects of political boundaries or solutions that are sensitive to political boundaries is therefore not reasonable under the circumstances.

Applicants further note that the comments made on page 35 (regarding claim 103) are unclear as the Examiner has not referred to a specific reference that Applicants can identify (see page 7 of WHAT?).

Applicants further note that the application of Frost to Fairfax County's tax assessment (pages 37-38) regarding claim 105 is also amiss as, while Fairfax County may be obligated to provide tax assessments on their website, there is no obligation to provide fancy user interfaces that cost substantial amounts to develop and maintain while providing no benefit to taxpayers. The proffered motivation provided at the top of page 38, i.e., "*that it would be convenient and*

user friendly to identify a specific property" ignores the fact that the present system, which allows for a user to input his address and get his tax assessment is not only convenient and user friendly, but far less expensive to maintain. As to the other proffered motivation provided at the top of page 38, i.e., that it could be used to "*identify a given region, such as a neighborhood or development*", Applicants point out that the Examiner has provided no legal authority authorizing Fairfax County to provide this service, or why this service must be linked to Fairfax County's tax assessment database.

The Sklarz Reference

The Office Action rejects claims 75, 84, 85, 88-93 and 106 under 35 USC §102(b) over Sklarz (US Pat. App. No. 2002/0087389); rejects claims 94, 102 and 107 under 35 USC §103(a) over Sklarz in view of Robbins (US Pat. App No. 2001/0039506); rejects claims 83, 86, 87, 103 and 104 under 35 USC §103(a) over Sklarz in view of Florance (U. S. Pat. App No. 2004/0030616); and rejects claim 105 under 35 USC §103(a) over Sklarz in view of Frost (US Pat. App No. 2005/0273346). These rejections are respectfully traversed.

In particular, Applicants assert that none of the above-references, individually or in combination, disclose or suggest a database of AVM values, as recited in the independent clams.

As an initial matter (see discussion above regarding basic definitions) the current Office Action has followed a curious tradition of this application by repeating the same mistake using a different reference. That is, not only has the Office Action failed to cite a single paragraph that references AVMs (again pointing Examiner Ruhl's attention to paragraph [0250], **which makes the first mention of AVMs**), but the text fundamentally relied upon by the Office Action in its 35 USC 102 rejection (pages 18+) cites only paragraphs [0041],[0047], [0056], [0059]-[0061] and [213], **the closest of which being a full 37 paragraphs of any AVM-related text**.

As to what exactly paragraph [0213] teaches, contrary to the assertions of the Office Action, this paragraph does not teach storing an AVM value in a database. **That is, it neither discusses anything about storing AVM values nor discusses anything about storing a "result" in a database.**

Applicant respectfully submits that each statement made in a document must be read in context. That is, it makes sense to read paragraph [0213] in context with paragraphs immediately

before and after, as well in context of any Figure referenced at the time. As such, paragraphs [0212]-[0214] are reproduced below:

As to Figure 12-14 (the relevant figures), Applicants have reproduced them below for convenience.

Fig. 12

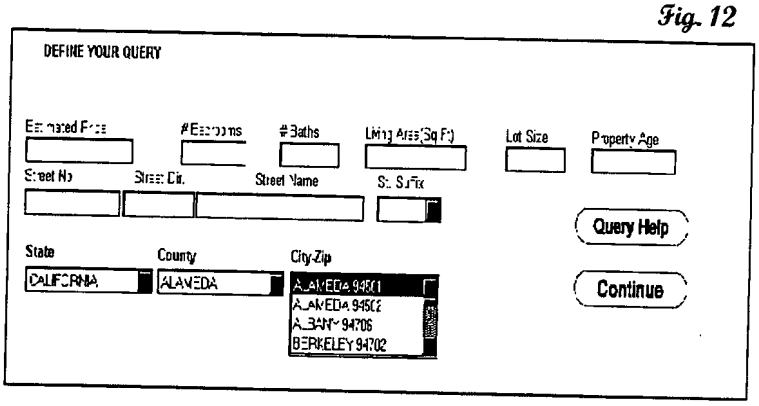


Fig. 13

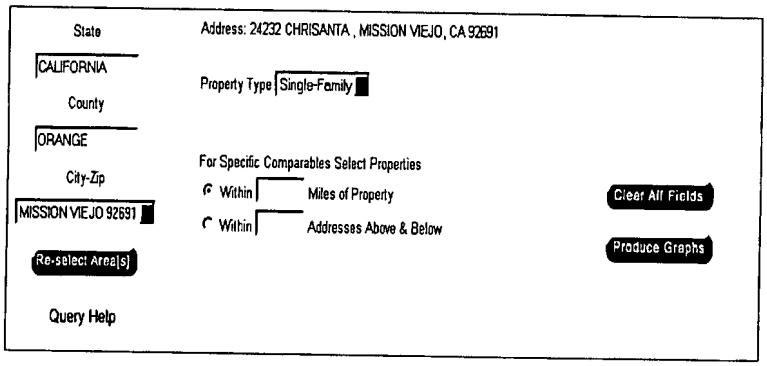
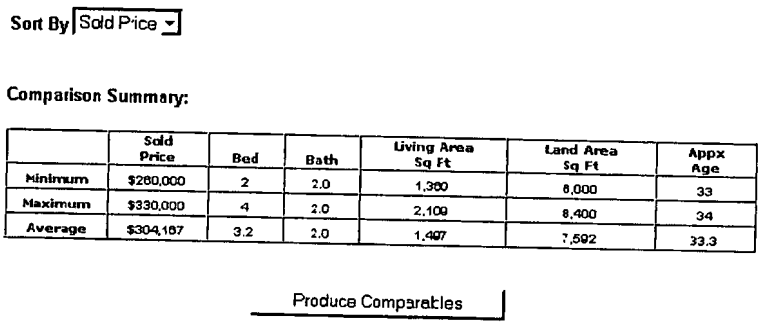


Fig. 14



	Sold Price	Bed	Bath	Living Area Sq Ft	Land Area Sq Ft	Appx Age
Minimum	$280,000	2	2.0	1,360	6,000	33
Maximum	$330,000	4	2.0	2,109	8,400	34
Average	$304,167	3.2	2.0	1,497	7,592	33.3

As can be clearly seen in the figures above, queries are supported, but no query with respect to AVM values. Conspicuously absent is any form of AVM value. Conspicuously present is that these figures represent selection of comparable properties presumably useful to generate valuations.

Contrary to an assumption voiced by Examiner Ruhl during the October 9, 2007 telephone interview, just because the title of the Sklarz application is "Value Your Home", this does not imply that any valuation be subject to the rules for deriving intermediate data used to produce those valuations. This is both common sense and consistent with the idea of reading passages in context, especially given that

As to the relevant text, that too is reproduced below for convenience:

> "[0212] Depending on the data preconditioning (preconditioning toggles set for each VYH data type at each Level), in building the second page of a sales trend query, the VYH trend engine will make available or remove dialog boxes (i.e., labels and query parameter input fields) from the second page. For example, if a data source does not support, report, or track the living area of dwellings in a geographic region, and the user specifies a query within that geographic regions, when the second query page is presented, a dialog box in which a user may specify a range of values for living area is not presented to the user. Also, in this example, decision tools that require square footage or other area measurement to have meaning (e.g., a graph of Price Per Square Foot Living Area) are not presented to the user. If a metadata value of N exists for a give VYH data type, values within dropdown lists or other types of parameter selection lists for that data type will be suppressed. For example, if, within a geographical area specified by a user, whether State, County, and CityZip(s), there are no "Duplex" properties in the database, when the second query screen is presented, the "Duplex" entry in the Property Type dropdown selection list will be deleted or greyed out from the list of selectable values.
> [0213] The VYH server software caches queries, and the response generated by a query, for a period of time ("cache period") selected by the operator of a VYH service. By accessing cached queries and responses, the VYH invention accelerates the provision of responses when the same query is received within the cache period."

Again, as can be clearly seen, there is no mention of AVM values, and the

relevant context supports only cache storage with respect to those queries used to produce comparable properties.

Applicants point out that, as discussed above, should a human be used to select comparable properties, this involves human judgment and therefore the end result is not an AVM value. Accordingly, the relevant text cited by Examiner Ruhl discusses an embodiment that have nothing to do with AVM values – an issue consistent with the fact that AVM values are discussed a full 37 paragraphs later, and in those 37 paragraphs at least 11 other figures are discussed

As a second issue, **Applicants point out that a cache is not a database**. A cache (in terms of memory) is defined as:

> **Cache** *noun* (computer science) RAM memory that is set aside as a specialized buffer storage that is continually updated; used to optimize data transfers between system elements with different characteristics.[8]

In computer science, a **cache** is a collection of data duplicating original values stored elsewhere or computed earlier, where the original data is expensive to fetch or to compute, relative to the cost of reading the cache. In other words, a cache is a temporary storage area where frequently accessed data can be stored for rapid access. Caches do not provide new functionality to existing applications, but merely help expedite such applications. Once the data is stored in the cache, future use can be made by accessing the cached copy rather than re-fetching or recomputing the original data, so that the average access time is lower.

Caches can used to store many things, but are themselves not databases. Accordingly, with respect to Sklarz even if the "responses" were stretched to imply AVM values, paragraph [0213] does not teach, suggest or even appreciate storing such "responses" in a database. In fact, paragraph [0213] teaches away from storing its "responses" in a database as it uses cache memory instead. Query results may be stored in a cache memory, but the cache memory is not itself a database that may be queried – an issue that should be apparent given that databases

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[8] WordNet 3.0 Dictionary (2006 Princeton University)

operate on the applications level of a computer while caches work on lower levels transparent to applications.

Applicants further point out that "cache periods" (as mentioned in paragraph [0213]) are typically periods measured in terms of minutes or maybe hours – usually never beyond an immediate session for which a user is engaged. Microsoft Windows, for example, controls cache policy in increments of seconds. For a person searching for comparables, it may make reasonable sense to store such results in cache while a user selects an appropriate set of parameters, **but beyond the immediate session, such cached results are generally useless.**

As there is no apparent need to store AVM values – and presumably none needed given the relevant text of paragraphs [0250]+ make no mention of any need to do so – technical need, economics and common sense teach away from such an application.

Finally, even if a cache were to contain a plurality of AVM values, it would be worthless as a search tool as caches are not made to be queried, and for all practical periods, query software would be oblivious to the existence of any cache a computer might have.

Accordingly, the text relied upon by the Office Action not only fails to recite AVMs, but is directed to databases used to derive AVM values or software used to derive comparable property information. Thus, the current Office Action has tried to equate databases used to derive AVM values with a database of AVM values. Applicants most respectfully point out that this is an issue that has repeated plagued this application with wasteful and costly prosecution, and that this repeated error goes contrary to a promise to give the term AVM patentable weight - made by SPE Weiss in an agreement with Applicants the better part of a year ago.

Thus, Sklarz does not teach each and every limitation of the independent claims. Further, as Robbins, Florance and Frost fail to disclose the same limitation (and Frost being circumvented by Applicants 1.131 Declaration anyway), the independent claims therefore constitute patentable subject matter with the dependent claims constituting patentable subject matter by virtue of their dependency as well as for the additional features they recite.

The Foretich Reference

The Office Action rejects claims 75, 84, 85, 87-95, 101, 102 and 106-108 under 35 USC §102(b) over Foretich (US Pat. App No. 2003/0191723); rejects claims 76, 96, 97, 100, 101, 108 and 109 under 35 USC §103(a) over Foretich; rejects claims 77-83, 86, 98, 99, 103, 104, 110 and 111 under 35 USC §103(a) over Foretich in view of Florance; and rejects claim 105 under 35 USC §103(a) over Foretich in view of Frost. These rejections are respectfully traversed.

In particular, Applicants assert that none of the applied art listed above, individually or in combination, teaches or suggests one or more databases embedded within a number of computer-readable storage mediums, the one or more databases containing records on a plurality of residential properties in a first geographic region, wherein each record of the one or more databases includes a first field containing an identifier of respective property and a second field containing an AVM value of each respective property, and wherein each AVM value of the plurality of properties is routinely modified to assure that the AVM value reflects an estimate designed to be generally current based on changes in the relevant housing market of each property, as recited in independent claim 75 and similarly recited in the other independent claims.

Regarding claims 76, 96 and 109 Applicants assert that it would not have been obvious at the time of the invention to modify Foretich to teach or suggest query device configured to perform a differential value search (DVS) on the one or more databases to produce a set of second properties, a differential value search (DVS) being a search based on a difference in value between a property's AVM value and an offer for sale value for the respective property.

As an initial matter, Applicants note the language of the Office Action on page 22 where paragraph [0162] discusses a database of stored values "*for later use*" and "*for use in later valuations or other processes*" and "*may be employed as comparables for later valuations as appropriate.*" The Office Action goes on to say that an "*AVM value is a type of data that a person of ordinary skill in the art is going to be concerned with*" and "*[a]nyone buying a house or giving out a financial loan for a house, is concerned with the value of the house itself (valuation/AVM).*" Respectfully, while the Office Action goes on to proclaim that this as "*a matter of common sense*", the entire argument put forth by the Office Action is wrought with errors, including:

(1) The assertion that the claimed subject matter of claims 76, 96 and 109 is but "common sense" is belied in that it has apparently escaped the notice of the real estate community for decades, and once presented to the real estate community by Applicants, was immediately recognized for its innovative approach.

(2) To Applicants knowledge, anyone buying a house doesn't need to access a database of AVMs, but needs only to have a single AVM generated – as is the business model of Verovalue and its competitors.

(3) To Applicants knowledge, anyone providing a loan does not need to access a database of valuations, but needs only to have a single valuation (AVM, appraisal or whatever) generated. This practice is perfectly consistent with the teachings of Foretich, which provides a single valuation to the intended customer.

(4) As a matter of common sense, no person or lending body will ever rely on any valuation (AVM, appraisal or otherwise) that reflects anything but a current value of a property. Any valuation of any database of Foretich quickly loses any relevance as a legitimate indicator of current market value. Who, exactly, would rely on an appraisal more than six month old?

Regarding the Office Action's additional statement on pages 22-23 (quoting paragraph [0006] of Foretich) that "*[s]ince the loan-to-value ratio is of great significance to lenders in making loan decisions as well as in determining applicable loan programs and interest rates, it is almost always necessary for a property valuation to be undertaken in connection with the lending process*," {underlined emphasis added by Examiner} Applicants merely ask "where does this require a database of AVMs?" Does it make sense that a lending officer will ask for the most recent valuation available or rely upon a valuation made months or (much more likely) years earlier.

Further, Applicants assert that, contrary to the statements made that lending officers are concerned with an offer for sale price, lending officers are concerned with two values: (1) the intrinsic value of the property, and (2) the amount of the loan.

Respectfully, the Office Action has displayed a complete misunderstanding of what a "loan-to-value ratio" (LTV) is. An LTV is the relationship, expressed as a percentage, of the

amount of money loaned to the appraised value of the real estate pledged as security for the loan. For example, an $85,000 loan on a $100,000 house would have an LTV of 85%.[9]

Applicants respectfully request that definitions of terms of art be reviewed and understood, such as "loan-to-value ratio," before developing rejections that rely on such terms of art.

Finally, with regard to the assertion made on pages 23-24 re "*[o]ne of ordinary skill in the art who invests in real estate, such as those who "flip" homes, (fix them up and sell them for profit) is clearly going to be interested in properties that are offered for sale at a price below their AVM value*," **Applicants respectfully point out that this assertion reflects a statement made by Applicants' representative, Mr. Mathis, to Examiner Ruhl about Applicants' personal experience in real estate and the start of their decision to provide computer-based tools for the real estate industry.** Using the Applicants' own personal experiences in order to justify a rejection clearly shows hindsight recognition, especially given that the Office Action has not bothered to show an independent source for this motivation. It is not particularly reasonable for the Examiner to use information provided to him by Applicants and then represent or tacitly imply that such information as within the knowledge of one of ordinary skill in the art.

Applicants further point out that "flipping properties" doesn't require someone to "fix them up" before reselling them (an issue not discussed between Mr. Mathis and Examiner Ruhl) and that AVM values are infamous for not taking into consideration things like property condition. See, The Big AVM Lie ("*AVMs base their value estimates without anyone ever evaluating the condition of your home or the condition of the comparable sales used to estimate your value.*").

Applicants next point to the Office Action's subsequent assertion (page 24) that "*[i]f you can buy a house for $200,000, that is really valued at $250,000, that may be a good purchase*" while outlandishly apparent on its face, actually says nothing more than what it says, i.e., nothing about the condition of a house or the accuracy of an AVM value. It also doesn't suggest searching a database of AVMs, but best suggests that a prospective buyer get an accurate appraisal of a property he's considering. Given that this assertion is made in reference to

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[9] http://investordictionary.com/definition/loan-to-value+ratio.aspx

Foretich, which is neither directed to nor discusses the business strategies of flipping – and in fact doesn't once discuss "offers for sale – Applicants respectfully assert this assertion is apparently meaningless in the present context given that it doesn't help Foretich solve any of it problems.

Continuing, the USPTO has recently published obviousness guidelines with respect to KSR v. Teleflex. More specifically, the USPTO has stated *"[i]f the search of the prior art and the resolution of the Graham factual inquiries reveal that an obviousness rejection may be made using the familiar teaching-suggestion-motivation (TSM) rationale, then such a rejection using the TSM rationale can still be made. Although the Supreme Court in* KSR *cautioned against an overly rigid application of TSM,* ***it also recognized that TSM was one of a number of valid rationales that could be used to determine obviousness***." {bolded emphasis added}

Applicants respectfully point out that the cited motivations provided by Examiner Ruhl are not to be found in the applied art, an easily proved misapplication of fact and/or not apparent to be connected with any particular problem appreciated by those skilled in the art.

Applicants again point first to page 22 (Foretich) for which the Office Action relies on paragraph [0006] regarding the loan-to-value ratio of a loan. As mentioned above, it is apparent that the Examiner has no understanding of this term of art as mortgage lenders are not concerned with the sale price of a house, but the amount of money borrowed against it. The Examiner inserts a large number of factual inaccuracies in the continuing text. For example, while the Examiner asserts on page 23 that 'the loan value for the mortgage lender is essentially the "offer for sale" price', this is patently false as AVMs are usable for loans only when the loan-to-value ratio is low. **As the rejection is based upon a false premise, the rejection is invalid and therefore there is no *prima facie* case of obviousness.**

Regarding the comments on page 24 (regarding claim 97), as well as those comments on page 25 (regarding claims 101 and 107), that various forms of updated databases would have been obvious in view of Foretich as "*updating data is something is well within the knowledge of one or ordinary skill in the art*," Applicants again note that such comments are belied by the existence of any reference showing updated databases of AVM values, and the fact that prior to Applicants invention such updated databases were unknown.

Applicants note that the Office Action has not provided any rational to update the valuation databases of Foretich, which was apparently intended to be used to secure loans by Fannie Mae and other lending institutions. What economic purpose would updating valuations serve, and without any concrete economic benefit to the devices of Foretich why expend the resources? Applicants point out that obviousness under the patent laws is not merely a question of what can be hypothetically done with obliviousness to economic consequences, or conclusory statements lacking real analysis.

Regarding the comments on page 28 (regarding claims 77, 78, 83 and 86) with respect to the claimed geographic information, Applicants point out that, its not enough to be able to theoretically combine Foretich and Florence, but there has to be something beyond mere conclusory statements. That is, why it would be desirable to view the region for a property for which a valuation is made (as asserted on page 29) when the inventors of Foretich though it unnecessary is a question worth serious consideration given that the economic price for developing and maintaining such software is not insignificant. Given that it is highly unlikely that a lending institution, e.g., Fannie Mae, would not know the address of a property for which it was processing a loan, any search tools provided by Florence would be completely nonsensical.

Regarding the comments on page 30 (regarding claims 98, 99, 103, 104, 110 and 111) with respect to providing map displays and/or pop-ups, Applicants assert that regardless of how nice or pleasant such graphics might seem, they do not come free and there is no functional benefit to a lending institution.

Based on the Differences in Functionality, KSR Suggests that the Claimed Subject Matter is Nonobvious

As stated in the recently published KSR guidelines (Federal Register, Vol. 72, No. 195, page 57530), the USPTO has identified seven rationales that may be used to form a prima facie case of obviousness including: (A) Combining prior art elements according to known methods to yield predictable results; (B) Simple substitution of one known element for another to obtain

predictable results; (C) Use of known technique to improve similar devices (methods, or products) in the same way; (D) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results; (E) ''Obvious to try''—choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success; (F) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art; (G) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention.

As these guidelines are recently published, Applicants acknowledge that Examiner Ruhl would have had no chance to identify the particular approach taken, or adhere to any of the particular steps that the USPTO requires of its examiners to formulate rejections for each of the approaches.

However, Applicants do point out that Examiner Ruhl has not identified each and every feature in the claims, e.g., an information system with one or more databases embedded within a number of computer-readable storage mediums, the one or more databases containing records on a plurality of residential properties in a first geographic region, wherein each record of the one or more databases includes a first field containing an identifier of respective property and a second field containing an AVM value of each respective property, and wherein each AVM value of the plurality of properties is modified routinely and at a rate such that the AVM value reflects an estimate designed to be generally current based on changes in the relevant housing market of each property; , as recited in independent claim 75 and similarly recited in the other independent claims.

Further, Applicants point out that none of the cited references discloses, or even remotely appreciates using an AVM database for a differential value search, and thus has not conformed to any rationale, such as rationale (A) or (B), that are precluded from use when "*each element merely would have performed the same function as it did separately.*" Regarding the DVS search claims, Applicants point out that the claimed subject matter uses AVM values according to a new function, i.e., for searching for potentially undervalued properties.

In contrast, the AVM values of Sklarz are used to generate loans, the valuations (AVMs?) of Foretich are used either to generate loans or used as a substitute for comparable properties to generate other valuations, and the tax assessments of Fairfax County (or any county) are used to assess tax duties. Accordingly, the Office Action has failed to meet the requirements of step (2) as at least one element of each reference must perform a new function.

Applicants most respectfully point out that broad, open-ended statements about unnamed possible uses do not subsume specific functions of later-developed technology. For example, paragraph [0162] of Foretich, which states that its knowledge base "*can store various classes of information derived during the valuation process for use in later valuations or other processes*", distinctly defines but a single function. The text about "*other purposes*" cannot be reasonably stretched to include specific functionality of the present claims.

A Number of Graham Factors Suggest That The Claimed Subject Matter is Nonobvious

The Supreme Court outlined a number of issues when determining obviousness and non-obviousness in Graham et al. v. John Deere Co. of Kansas City et al., 383 U.S. 1 (1966) (commonly referred to as the "Graham factors") which include: (1) the scope and content of the prior art; (2) the level of ordinary skill in the prior art; (3) the differences between the claimed invention and the prior art; and (4) objective evidence of nonobviousness. In addition, the Court outlined examples of factors that show "objective evidence of nonobviousness," including: (1) commercial success; (2) long-felt but unsolved needs; and (3) failure of others. Other courts have considered additional factors as well. See; Allen Archery, Inc. v. Browning Mfg. Co., 819 F.2d 1087, 1092, 2 USPQ2d 1490, 1493 (Fed. Cir. 1987) (considering copying and praise as indicators of nonobviousness); Diversitech Corp. v. Century Steps, Inc., 850 F.2d 675, 679, 7 USPQ2d 1315, 1319 (Fed. Cir. 1988) (considering copying as an indicator of nonobviousness).

As shown by the accompanying 1.132 Declarations, Applicants have provided secondary evidence of non-obviousness.

Conclusion

Thus, the independent claims contain patentable subject matter. The dependent claims, in turn, are patentable by virtue of their dependency as well as for the additional features they recite. Accordingly, withdrawal of all rejections is respectfully requested.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited. Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is welcomed to contact the undersigned attorney at the below-listed number and address.

In the event this paper is not timely filed, Applicants petition for an appropriate extension of time. Please charge any fee deficiency or credit any overpayment to Deposit Account No. 14-0112.

Respectfully submitted,

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